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CLAIMS

1. An apparatus for control and certification of the delivery of goods object of electronic commerce by means of Internet, Intranet, Extranet connections or the like and for the concurrent control and certification of the execution of the related payment, comprising:

a) a system for reading an electronic card and for managing authorization processes by the electronic card issuing company(26, 28, 30, 31);

b) an apparatus (27) for monitoring and interpretation of application protocols for network data transmission systems connected to said system for reading an electronic card and comprising:

b1) a data packets monitoring device (9) at a layer corresponding to the OSI layer 2, said data packets comprising control frames and information frames, wherein the control and information frames contain a header portion and a body portion, said header portion for the distinction between an information frame and a control frame;

b2) a control unit (15) receiving as an input the data coming from the monitoring device (9) and comprising means for the discrimination of the control frames from the information frames;

b3) a dating unit (16) connected to the control unit (15) and associating a monitoring time to the control frames and to the information frames;

b4) a discriminated data storing unit (17) storing the control and the information frames and the monitoring time thereof, bidirectionally connected to the control unit (15);

b5) a predetermined data storing unit (18), bidirectionally connected to the control unit (15), said predetermined data representing possible interpretations of the information frames contained in the discriminated data storing unit (17);

b6) means for comparing, by the control unit (15), said predetermined data stored in the storing unit (18) with the data contained in the body portion of the information frames stored in the discriminated data storing unit (17), thus reconstructing the information frames according to their specific application syntax;

b7) means for ordering, according to the time and kind of communication, the information frames reconstructed according to their specific application syntax, thus reconstructing application sequences occurred between a determined source processor and a determined destination processor; and

b8) means for ordering said information frames ordered according to the time and kind of communication also according to a logical criterion, thus reconstructing

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the logical path of said application sequences occurred between a determined source processor and a determined destination processor, and

c) a data storing unit of the various transactions object of electronic commerce monitored and interpreted by means of said apparatus (27) for monitoring and interpretation of application protocols.

2. The apparatus according to claim 1, characterized in that the system for reading an electronic card and for managing authorization processes by the electronic card issuing company comprises a POS terminal (26) connected to the apparatus (27) for monitoring and interpretation of application protocols for network data transmission systems, by means of respective local network interfaces (37, 38) and a hub (39) positioned between said local network interfaces (37, 38).

3. The apparatus according to claim 1 or 2, characterized in that it is connected in local network to one or more processors (24).

4. The apparatus according to any of the preceding claims, characterized in that management of the authorization processes by the electronic card issuing company occurs on a dedicated telephone line (31).

5. The apparatus according to claim 4, characterized in that said dedicated telephone line is the D ISDN channel.

6. The apparatus according to claim 4, characterized in that said dedicated telephone line is a radiomobile line or a satellite.

7. The apparatus according to any of the preceding claims, characterized in that the system for reading an electronic card and for managing authorization processes by the electronic card issuing company (26, 28, 30, 31) communicates, once the transaction is operated, directly with the service provider bank.

8. The apparatus according to any of the claims 1 to 6, characterized in that the system for reading an electronic card and for managing authorization processes by the electronic card issuing company (26, 28, 30, 31) communicates, once the transaction is operated, with a service center which in turn sums all the amounts related to various providers and communicates with the respective banks thereof.

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9. The apparatus according to any of the preceding claims, characterized in that said means for ordering said information frames according to a logical criterion comprise means for reciprocally comparing the body portion of the information frames.

10. The apparatus according to any of the claims from 1 to 8, characterized in that said means for ordering said information frames according to a logical criterion comprise means for comparing each sequence of body portions of the information frames with a set of predetermined sequences, said predetermined sequences representing possible interpretations of the information frames sequences contained in the discriminated data storing unit (17), said predetermined sequences being contained in said predetermined data storing unit (18).

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